# Status report on NCES's progress to advance its strategic goals and objectives: A snapshot of current plans, strategies, processes, interagency coordination and collaboration, and resources

This document summarizes NCES's approach to and progress in advancing its strategic goals and objectives (available at <u>National Center for Education Statistics - About Us</u>). For each of NCES's strategic goals and objectives, this document presents three corresponding sections: (1) what NCES has done to date, (2) what NCES is currently working on, and (3) what NCES would do with more resources to meet the goal and objectives.

It is important to note that the activities listed under each of the first two sections, what NCES has done and what it is currently working on, represent the Center's best efforts toward achieving its goals, given NCES's urgent need for additional staff and its declining purchasing power in the face of increasing responsibilities in recent years. In contrast, the activities listed under the third section, what NCES would do with more resources, are inherently more innovative, ambitious, and impactful and represent what could be achieved with adequate staff and resources.

**Goal 1.** Develop and disseminate relevant, timely, and innovative products that align with the needs of today's education data ecosystem.

**Objective 1.1:** Keep the Center's scope of work aligned with the needs of the 21<sup>st</sup>-century education data ecosystem to ensure the relevance and value of the Center's work.

**Objective 1.2:** Execute a robust and coordinated dissemination strategy for the Center's data products through a range of formats and platforms to engage and inform key audiences.

**Objective 1.3:** Monitor the use and impact of NCES products to understand how they address the nation's data needs within the U.S. data ecosystem.

#### To meet this goal, NCES has

- Used its School Pulse Panel to ask principals about topics of concern to them, which have generated ideas for topics to be asked about in future data collections.
- Continued outreach to participants and stakeholders, for example, by participating in and convening professional conferences, to engage with key audiences.
- Launched phase 1 of a new Center-wide tracking system to
  - collect data on the development, production, dissemination, and impact of its data products;
  - facilitate the coordination of dissemination strategies;
  - streamline technical reviews; and
  - assess its data products' alignment with data needs.

#### NCES is currently in the process of

- Evaluating the scope and relevance of its data collections, indicators, and reporting, with input from NCES expert panels and stakeholders and a future Standing Committee (recommended by NASEM) to help prioritize NCES's work.
- Developing a library of geospatial and geo-enabled web services and APIs to make NCES administrative data assets more findable, accessible, interoperable, and reusable (in accordance with federal FAIR data principles).
- Instituting systems to monitor the use, relevance, and impact of products, by

- attaching Digital Object Identifiers to its products, and
- participating in a pilot of the <u>Democratizing Data</u>'s monitoring system along with other statistical agencies.

**With additional staffing and resources**, including those requested as part of support for the Evidence Act, NCES would be able to improve our alignment with the education data ecosystem, via

- data collections with greater granularity (e.g., data at lower geographic levels, data with more racial/ethnic coverage).
- ongoing tracking of other federal, state, and local work to collect and disseminate information about education (to strengthen cross-agency efforts, reduce burden when possible, and increase data utility).
- capacity building for districts and states to develop geospatial data infrastructure to support local decision-making and provide supplemental data to ED/NCES.
- regular monitoring of the use, relevance, and impact of NCES data across a greater range of both internal ED stakeholders and public sources.

**Goal 2.** Improve and innovate the Center's operations, management, and support for legislative and regulatory requirements.

**Objective 2.1:** Increase the application of R&D and data science to improve the efficiency, accuracy, and use of NCES data products in ever-evolving data ecosystems.

**Objective 2.2:** Apply a continuous quality improvement model to the Center's publication pipeline to improve timeliness, relevance, usage, and, ultimately, impact of NCES data products.

**Objective 2.3:** Institute a systematic approach to administration, management, planning, operations, and coordination to create more flexible, nimble, and dynamic systems for meeting legislative and regulatory requirements as well as for greater efficiency and collaboration across the Center.

**Objective 2.4:** Make improvements to the Statistical Standards to better reflect current methodologies and data dissemination practices.

**Objective 2.5:** Develop Psychometric Standards to establish a common set of guidelines, criteria, and procedures across all NCES programs involving psychometric work to ensure that the programs yield data that allow reliable, valid, and fair inferences.

#### To meet this goal, NCES has:

- Hired its first Chief Psychometrician charged with
  - unifying and improving standards for Center-wide assessment methodology and design (including large-scale and longitudinal assessments as well as related linking studies);
  - updating Center-wide testing and psychometric technical standards and guidelines; and
  - designing and conducting innovative center-wide research and development (R&D) studies.

#### NCES is currently in the process of

- Relationship-building with data science experts and survey methodologists through existing federal
  vehicles, such as the <u>America's Datahub Consortium</u>, managed by the National Center for Science and
  Engineering Studies.
- Examining how data science and administrative data matching may improve efficiency and reduce costs in survey operations.

- Growing the EDGE program to support data required for statutory programs like Title I. REAP, and NAEP, and to develop geospatial data and metadata assets required to address the Geospatial Data Act.
- Automating routine procedures for coordination, management, and oversight processes, such as
  - centralizing the Center's annual slate of publications;
  - coordinating and archiving OMB package submissions;
  - improving interoperability across Center study designs, indicators, and reporting; and
  - improving the integrated budgeting system for Center studies and services.
- Testing and implementing innovations to improve the efficiency of NAEP, including online NAEP, which will enable the use of less-expensive testing devices and potentially the use of schools' equipment rather than NAEP-provided devices ("device agnostic" NAEP) and a reduction in field staff needed to administer NAEP ("reduced contact" NAEP), automated scoring using artificial intelligence (AI), as well as investigating the use of AI to extend automated item generation.
- Developing broader standards, including psychometric standards (to establish a common set of guidelines, criteria, and procedures across all NCES programs involving psychometric work) and an update of its statistical standards (to address new digital reporting, DEIA, and data science needs).

## With additional staffing and resources, NCES would

- Pursue an integrated R&D agenda across NCES operational units to:
  - explore new external data sources and linkages with "found data," such as from web-scraping;
  - evaluate new data collection methods, such as remote test proctoring and short-term longitudinal designs;
  - study how AI, such as chatbots, could enhance item development, data collection methods, analysis, and reporting; and
  - evaluate the application of small area estimate methodology across the Center's data.
- Expand geospatial activities to explore new indicators of poverty, employment, and neighborhood conditions to inform statutory and statistical programs.
- Institute a centralized sampling methodology to improve design, cost, and respondent burden.
- Hire staff to support Evidence Act requirements of the Statistical Official, CIPSEA 2018 and related mandates, such as the Standard Application Process under Title III.

**Goal 3.** Foster and leverage mutually beneficial partnerships with practitioners, researchers, policymakers, and government agencies at all levels.

**Objective 3.1**: Continue to develop and improve partnerships with states, school districts, leading education associations, and other stakeholders to increase support for participation in NCES studies and address their data needs.

**Objective 3.2:** Improve external communication and coordination to increase awareness and use of NCES data, products, and services—including collaborative data governance, linkages, and capacity-building.

**Objective 3.3:** Improve internal communications to strengthen collaboration and partnership within NCES and across IES and ED.

## To meet this goal, NCES has

- Hired its first Director of Strategic Partnerships to coordinate existing (but siloed) technical panels, outreach activities, and partnership agreements with states, districts, associations, and other stakeholders.
- Continued supporting existing NCES groups to foster partnerships and build capacity, including
  - the Forum (LEA, SEA and federal partners), which produces timely best practice resources useful at the local, state and federal levels;
  - the National Postsecondary Education Cooperative, which serves as R&D for IPEDS; and
  - NCES's annual meeting with postsecondary state data coordinators to provide them with information and engage them in improving data collection.
- Made limited increases in annual funding for assistance to state education agencies to develop their data capabilities, including SLDS and the Common Education Data Standards (CEDS).

## NCES is currently in the process of

- Developing a comprehensive Center-wide program to support recruitment of districts and schools, including (a) establishing a database of local and state stakeholder communications and participation (to improve evidence-based outreach strategies), and (b) implementing an external communication campaign to
  - feature accessible stakeholder products, such as infographics, dashboards, data tools, and data points;
  - highlight NCES's annual accomplishments and activities, such as innovations, research, and development milestones; and
  - update stakeholders on upcoming data, resources, and trainings.
- Building a state-of-the art communication management system (e.g., dashboards of Center-wide activities, products, and services) to improve internal awareness and collaboration across NCES, IES, and ED.
- Piloting methods for engaging with schools and school districts to reduce burden and increase the likelihood of participation in NCES data collections, e.g., via standardized data sharing agreements, coordinated data requests, and new ways to provide feedback or reports to institutional respondents. [Recommended by NASEM, this is also preparatory work for a future "State Coordinator Group" (below)]

## With additional staffing and resources NCES would

- Implement additional technical assistance including convenings of state longitudinal data experts to promote "best practices" and collaboration on the benefits of standardized data.
- Establish a "State Coordinator Group" (modeled on the NAEP State Coordinators) to broadly support data collection needs and improve two-way communications with states and districts.
- Establish an "NCES Corps" (modeled on AmeriCorps) to place data collection volunteers in needy districts and schools to assist with the administration of NCES studies, promote data for evidence building and "best practices," and provide other support, as needed, by schools and districts.
- Re-institute and re-imagine existing NCES partnership programs, including internships, fellowships, postdocs, and other federal programs, such as the Federation of American Scientists' Impact Fellowship Program.
- Expand collaboration with the Census Bureau to produce new policy-relevant statistical indicators from existing data investments.

**Goal 4.** Embed the principles of diversity, equity, inclusion, and accessibility (DEIA) in all aspects of the Center's work, studies, and data products.

**Objective 4.1:** Update NCES's Statistical Standards to integrate the principles of diversity, equity, inclusion, and accessibility.

**Objective 4.2:** Maintain and develop measures of diversity, equity, inclusion, and accessibility in education to ensure NCES data remain relevant for policymaking.

**Objective 4.3:** Invest in NCES's human capital to promote diversity, equity, inclusion, and accessibility.

**Objective 4.4:** Monitor NCES contractors' activities and performance to achieve diversity, equity, inclusion, and accessibility in all aspects of their work.

### To meet this goal, NCES has

- Assigned staff serving as co-chairs and committee leads to support
  - the OMB's interagency and public training and technical assistance activities regarding the update to Statistical Directive 15.
  - the Subcommittee on Equitable Data (mandated by the White House Equitable Data Working Group, Executive Order 13985, with over 40 members of an interagency collaborative to promote a whole-of-government approach to equitable data).
  - SOGI interagency working groups to promote equitable data collections, relevant research and development, and published best practices.
  - Developed a <u>framework</u> for collecting data and developing indicators on education technology and equity.
  - Developed indicators of rurality, poverty, and district-level demographic conditions of school-age children to inform statutory and statistical programs.
- Funded a National Academies of Science (NAS) expert panel to research and publish <u>Monitoring Educational</u> Equity (2019).
- Facilitated and supported a working group composed of State SLDS teams working on equity issues in their States.

#### NCES is currently in the process of

- Integrating DEIA requirements into Center-wide activities, by updating its statistical standards, developing new contracting templates, and conducting listening sessions to ensure compliance.
- Improving measurement by
  - Developing a composite *education equity index*, at the national and state levels, drawing on *Monitoring Educational Equity* (2019).
  - Developing an index of socio-economic status (SES) based on National School Lunch Program eligibility and data from NAEP student background questionnaires.
  - Designing an Equity Dashboard representing NCES data collections, and other relevant federal indicators, to assist in the identification of gaps in our collective capacity to understand equity in education.
  - Instituting regular data collections for information that has not been regularly collected (e.g., on schools and students in Puerto Rico and Outlying Areas, on gender by adding 'Another Gender' in IPEDS).

## With additional staffing and resources, NCES would

- Increase staff participation in DEIA community of practice activities at conferences and stakeholder activities promoting Center-wide data and related blended data.
- Increase outreach to Minority Servicing Institutions and Historically Black Colleges and Universities to maximize participation in NCES internship, fellowship, and grant programs and promote statistical and psychometric talent from more diverse backgrounds.
- Build upon current work developing national and state level capacity to conduct innovative equity analyses through SLDS TA and additional trainings, workshops, and seminars.
- Develop and test experimental indicators of rurality and poverty (including a geospatial measure of poverty) to better inform statutory and statistical programs.
- Increase staff capacity to conduct and publish special analyses focused on issues concerning DEIA data.